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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/624,444	DECORDT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Joseph D. Anthony	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 12/13/2004.
2. ☒ The allowed claim(s) is/are 7-9, 11-14 [renumbered as 1-3, 4-7].
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.  |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David I. Hedden on 03/09/05.

The application has been amended as follows:

In claim 7, line 5, after the word "amine" insert --or an aliphatic alkanolamine--.

In claim 7, line 9, after the word "of" insert --aliphatic--.

In claim 7, line 9, after the word "amine" insert --or aliphatic alkanolamine--.

Claim 12 (currently amended) The process of claim 7 wherein [the aliphatic amine is an alkanolamine.] component (a) is an alkanolamine.

In claim 14, line 1, after the phrase "weight ratio of" insert --aliphatic--.

In claim 14, line 1, after the word "amine" insert --or aliphatic alkanolamine--.

Non-elected claims 1-6 have been canceled.

2. The following is an examiner's statement of reasons for allowance:

The above examiner's amendment to independent claim 7 was made so that there would be proper antecedent basis for the alkanolamine component as set forth in dependent claim 12.

The reasons for allowance of the present applicant are deemed to be the below reasons, which are not necessarily those reasons advanced by applicant's representative in the remarks section of the amendment filed 12/13/04. The examiner does want to make clear that all of the previous applied prior-art references were applied as primary references. **No rejection** was made of one reference, (i.e. Manaba et al) taken in view of any of the other applied references as improperly believed by applicant's representative according to his remarks.

Applicant's claims are deemed to be patentable over the previously applied prior-art patents for the following reasons.

Manaba et al. U.S. Patent Number 4,219,433 is deemed to be the closest of the previously applied references. Although Manaba et al does disclose corrosion inhibition compositions that do in fact actually comprise all three of applicant's claimed components (see composition 2 in Table 1 and Example 2), and does disclose broad concentration ranges of these components that can overlap applicant's claimed weight ratios, the great preponderance of the

evidence from the patent itself is deemed to teach away from applicant's invention as presently claimed. In the first place, compositions 1, 2 and 3 in Table 1 are all positively excluded by applicant's independent claim 1 due to the limitation of: "such that the corrosion inhibiting composition contains less than 1.0 part of an inorganic salt per hundred parts of the corrosion inhibiting compositions". Compositions 1, 2 and 4 are excluded because they all contain much more inorganic salt than is allowed by said limitation.

In regards to composition 2 in Table 1 which contains no inorganic salt, the calculated weight ratio of triethanolamine to the two azole components is  $(3,000):(300 + 100)$  which is the same as 7.5:1. Likewise the calculated weight ratio of benzoate to the two azole components is  $(8,000):(300 + 100)$  which is the same as 20:1. Both of these calculated weight ratios are far outside of applicant's claimed weight ratios of amine to azole of from 50:1 to 30:1, and benzoate to azole of from 40:1 to 150:1. When the examiner did the same weight ratio calculation for example 2 which does comprise an inorganic phosphate in a concentration of 0.8% (which is acceptable according to the independent claim 7), the weight ratio of triethanolamine to the two azole components is  $(4.0):(0.25 + 0.1)$  which is the same as 11.4:1. Likewise the calculated weight ratio of benzoate to the two azole components is  $(5.0):(0.25 + 0.1)$  which is the same as 14.3:1. Both of these calculated weight ratios are also far outside of applicant's claimed weight ratios of amine to azole of from 50:1 to 30:1, and benzoate to azole of from 40:1 to 150:1. As such, Manabe et al is deemed to lack sufficient

guidance and thus motivation for one having ordinary skill in the art to make a corrosion inhibition composition that actually comprises applicant's claimed components within applicant's claimed concentration weight ratios.

The preponderance of the evidence for the previous applied prior-art reference to Peters et al. U.S. Patent Number 4,404,113 is also deemed to strongly teach away from applicant's claimed invention even though all three of applicant's required components are directly disclosed by the reference as effective corrosion inhibitors, see column 3, lines 50-68. The preponderance of the evidence that Peters et al teach away from applicant's claimed invention is as followed: 1) none of the 7 examples according to the invention contains an amine component which is a required component in applicant's invention. 2) none of examples 2-7 contains an azole component which is required by applicant's invention, and 3) in examples 1-3 the concentration of the sodium tetraborate is higher than that permitted due to applicant's independent claim 7 limitation of: "such that the corrosion inhibiting composition contains less than 1.0 part of an inorganic salt per hundred parts of the corrosion inhibiting compositions". As such, Peters et al. is deemed to lack sufficient guidance and thus motivation for one having ordinary skill in the art to make a corrosion inhibition composition that actually comprises applicant's claimed components within applicant's claimed concentration weight ratios.

The preponderance of the evidence for the previous applied prior-art references to Miksic et al. U.S. Patent Numbers (5,855,975 and 5,422,187) is

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also deemed to strongly teach away from applicant's claimed invention even though all three of applicant's required components are directly disclosed by the reference as effective corrosion inhibitors. The preponderance of the evidence that the two Miksic et al patents teach away from applicant's claimed invention is as followed: 1) none of the examples according to the invention actually contain all three of applicant's required component together, 2) in examples IA-IV all contain a concentration of the ammonium molybdate that is higher than that permitted due to applicant's independent claim 7 limitation of: "such that the corrosion inhibiting composition contains less than 1.0 part of an inorganic salt per hundred parts of the corrosion inhibiting compositions", and 3) the calculated weigh ratio of benzoate to azole in Example V is 39:1 which is outside of applicant's claimed benzoate to azole weight ratio of from 40:1 to 150:1. As such, both Miksic et al. patents are deemed to lack sufficient guidance and thus motivation for one having ordinary skill in the art to make a corrosion inhibition composition that actually comprises applicant's claimed components within applicant's claimed concentration weight ratios.

The other previous applied prior-art references to Mulvihill et al. and Haas et al are also deemed as not to disclose or suggest with any specificity, to one having ordinary skill in the art, a sufficient reason to make applicant's corrosion inhibition compositions within applicant's claimed weight ratios.

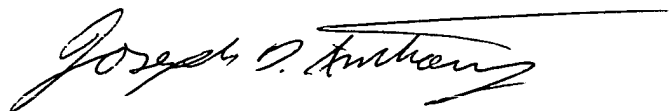
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Examiner Information***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (703) 872-9306. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



**Joseph D. Anthony**  
**Primary Patent Examiner**  
**Art Unit 1714**

3/9/05